What is claimed is:

1. An etching mask used for selectively etching a workpiece, wherein:

the mask is made of a metal and has a cross-sectional shape including a rectangular first region that determines a pattern width of the workpiece and a second region that intercepts an application of etching beams to a sidewall of the first region while etching is performed.

2. An etching mask according to claim 1, being T-shaped in cross section.

3. An etching mask according to claim 1 or 2 whose cross section includes a vertical bar an end of which comes to contact with a surface of the workpiece and a lateral bar placed on the other end of the vertical bar whose width is greater than that of the vertical bar, wherein the pattern width of the workpiece is determined by the width of the vertical bar.

4. An etching mask according to claim 1 or 2, the metal being selected from the group consisting of NiFe, NiB, NiP, Cu, Au, and an alloy including Co or Ta.

5. A method of making an etching mask made of a metal and having a T-shaped cross section including a vertical bar and a lateral bar, including the steps of:

forming a film for mask formation on a workpiece and forming an

opening in the film for mask formation, the opening reaching the workpiece and having a specific width; and

forming a metal film in the opening and over a region around the opening to form the etching mask and removing the film for mask formation.

6. A method according to claim 5 wherein the thickness of the film for mask formation is made equal to the height of the vertical bar of the mask and the width of the opening is made equal to the width of the vertical bar.

7. A method of making an etching mask made of a metal and having a T-shaped cross section including a vertical bar and a lateral bar, including the steps of:

forming a film for mask formation having a specific thickness on a workpiece and performing a first exposure on a region of a specific width in the film by such an exposure amount that reaches the workpiece;

after the first exposure, forming a T-shaped exposed region by performing a second exposure on a region in the film having a width greater than that of the region exposed through the first exposure by an exposure amount smaller than that of the first exposure;

selectively removing the exposed regions of the film for mask formation to form a T-shaped opening; and

forming a metal film in the opening of the film for mask formation to form the etching mask and removing the film for mask formation.

8. A method according to claim 7 wherein the thickness of the film for mask formation is made equal to the height of the mask, the width of the opening of the film for mask formation formed by the first exposure is made equal to the width of the vertical bar, and the width of the opening formed by the second exposure is made equal to the width of the lateral bar.

9. A method of making an etching mask made of a metal and having a T-shaped cross section including a vertical bar and a lateral bar, including the steps of:

forming a first film for mask formation on a workpiece and forming a first opening having a specific width that reaches the workpiece in the first film;

forming a metal film in the first opening and removing the first film;

forming a second film for mask formation on the metal film and the workpiece and then forming a second opening in the second film, the second opening reaching the metal film and having a width greater than that of the metal film; and

forming a metal film in the second opening to form the etching mask that is T-shaped in cross section and then removing the second film.

10. A method of making an etching mask made of a metal and having a T-shaped cross section including a vertical bar and a lateral bar, including the steps of:

forming a first film for mask formation on a workpiece and forming a

first opening having a specific width that reaches the workpiece in the first film;

forming a metal film in the first opening, forming a second film for mask formation on the metal film and the first film, and then forming a second opening in the second film, the second opening reaching the metal film and having a width greater than that of the metal film; and

forming a metal film in the second opening to form the etching mask that is T-shaped in cross section and then removing the first and second films.

11. A method according to claim 9 or 10 wherein the thickness of the first film is made equal to the height of the vertical bar of the mask, the width of the first opening is made equal to the width of the vertical bar, and the width of the second opening is made equal to the width of the lateral bar.

12. A method according to any of claims 5 to 10 wherein the metal film is formed by plating.

13. A method according to claim 12 wherein the plating is electroless plating.

14. An etching method including the steps of: forming an etching mask made of a metal and having a T-shaped cross section on a workpiece, and then performing micromachining of the workpiece by dry etching through

the use of the etching mask.

15. An etching method according to claim 14 wherein the dry etching is performed through ion beam etching.

16. A magnetic head device comprising an inductive writing head including a first writing pole, a second writing pole corresponding to the first writing pole, and a gap layer placed between the first and second writing poles, wherein

the second writing pole has a rectangular cross section whose sidewall is substantially orthogonal to a surface of the gap layer.

17. A magnetic head device comprising an inductive writing head including a first writing pole, a second writing pole corresponding to the first writing pole, and a gap layer placed between the first and second writing poles, wherein

at least part of the first writing pole, the gap layer and the second writing pole are equal to one another in width and each have a rectangular cross section whose sidewall is substantially orthogonal to a surface of a base layer.

18. A magnetic head device comprising an inductive writing head including a first writing pole, a second writing pole corresponding to the first writing pole, and a gap layer placed between the first and second writing

poles, wherein

the gap layer and the first writing pole are formed through dry etching using an etching mask made of a magnetic material and having a T-shaped cross section, and the etching mask is the second writing pole.

19. A magnetic head device according to claim 16 or 18, further comprising a magnetoresistive reading head including a magnetoresistive layer placed between two shield layers, wherein one of the shield layers functions as the first writing pole as well.

20. A method of manufacturing a magnetic head device comprising an inductive writing head including a first writing pole, a second writing pole corresponding to the first writing pole, and a gap layer placed between the first and second writing poles, including the steps of:

stacking a layer to be the first writing pole, the gap layer, and a layer to be the second writing pole in this order and then forming an etching mask made of a metal and having a T-shaped cross section on the layer to be the second writing pole; and

selectively removing the layer to be the second writing pole by dry etching using the etching mask to form a rectangular cross section.

21. A method of manufacturing a magnetic head device comprising an inductive writing head including a first writing pole, a second writing pole corresponding to the first writing pole, and a gap layer placed between the

first and second writing poles, including the steps of:

stacking a layer to be the first writing pole, the gap layer, and a layer to be the second writing pole in this order and then forming an etching mask made of a metal and having a T-shaped cross section on the layer to be the second writing pole; and

selectively removing the layer to be the second writing pole, the gap layer, and a region to the middle in depth of the layer to be the first writing pole in this order by dry etching using the etching mask to form a rectangular cross section.

22. A method of manufacturing a magnetic head device comprising an inductive writing head including a first writing pole, a second writing pole corresponding to the first writing pole, and a gap layer placed between the first and second writing poles, including the steps of:

stacking a layer to be the first writing pole and the gap layer, and then forming an etching mask made of a magnetic material and having a T-shaped cross section to be the second writing pole on the gap layer; and

selectively removing the gap layer and a region to the middle in depth of the layer to be the first writing pole in this order by dry etching using the etching mask to form a rectangular cross section.

23. A method according to any of claims 20 to 22 wherein the step of forming the etching mask is performed through the method as in claim 5.

24. A method according to any of claims 20 to 22 wherein the step of forming the etching mask is performed through the method as in claim 7.

25. A method according to any of claims 20 to 22 wherein the step of forming the etching mask is performed through the method as in claim 9.

26. A method according to any of claims 20 to 22 wherein the step of forming the etching mask is performed through the method as in claim 10.